99' FEST-WEST '89
San Diego
February
18 - 19
PLAN AHEAD
BE THERE!

Toples

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LA 99er COMPUTER GROUP Newsletter
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T n T

FEST-WEST'89 SAN DIEGO

Great news, the Boards of the San Diego area user groups are going full steam ahead with FEST-WEST'89. February 18 and 19, 1989. The two day event will be headquartered at the fabulous Lafayette Hotel, located in the heart of San Diego.

This is the three day Presidents Day weekend, and will be an outstanding vacation for the entire family. The Lafayette is 12 minutes from the San Diego Airport via courtesy limo, ditto the Amtrak Station. THREE minutes to the famous San Diego Zoo and Balboa Park, SEVEN minutes to Old Town, EIGHT minutes to the City Center, TWENTY FIVE minutes to Tijuana, Mexico, and THIRTY FIVE minutes to Wild Animal Park! Now how ever can anyone pass this one up?

Woody Wilson and the San Diego area user groups have really found an ideal Hotel in which to Host their world-wide guests. Room rates will average $30-$35 per person shared, Continental breakfast is complimentary. There is an Olympic size 80 degree heated pool, a great Jacuzzi at 100 degrees, free indoor and outdoor parking, just the lovliest place I have seen in a long time.

Circle your calendars, bid your vacations, reserve that Holiday weekend, book super-saver fares, give your family and yourself a treat. Come on down, remember we always have a week of 80 degree temperature in February, we will put our bid in. More to follow.

SAD NEWS,

A year or so ago we became aware Bill Knecht was fighting cancer. We wanted to profile him while he was with us and called a few persons to do this. Unfortunately the material never arrived and the profile was never written. Bill passed away a couple of days ago, and the community lost a great 99/4Aer. RIP Bill, you were and are in our thoughts.

TI-BASE

We have seen several reviews of this program that mention only that it is "produced" or "released" by Texaments. To our knowledge the program was written by Dennis Faherty, father of Chris Faherty, who wrote TI-Artist, and was released by THEIR company, Inscebot. We in fact also carry it in our Marketplace.

HUNTER VALLEY,

We have responded to their wish to exchange newsletters, they have been on our mailing list since May, perhaps their query and our mailing crossed somewhere over the Pacific, hopefully not on it, as we mail ALL newsletters First Class Air.

ADDRESSES,

Please check your address list and update our PO Box, we don't want the forwarding to expire, and we don't want to miss your newsletter, and we sure don't want to send out individual notices to those still mailing to Gardena. George is now in New York, long trip to the Gardena P.O.

GEORGE AND CHICK,

George, when last spoken with was imminently leaving the hospital for an intermittant stay at a rehab/long term care facility. He was going to let us know when the change occured, and if the telephone number was changing. I just called Fred to see if that had indeed happened, when lo and behold thanks to call waiting, viola! it was George. He sounded upbeat, had weathered a bit of a

NOTE NEW ADDRESS PLEASE
L.A. 99ers COMPUTER GROUP P.O. BOX 67A79 LOS ANGELES, CA. 90067

storm, was once again starting intense chemotherapy, and would probably be relocated shortly. So instead of giving you all a telephone number to call, tune in next month for this data.

Chick, this pillar of strength, was demonstrating just how strong and fit he is to his grandson, and caused a bit of a heart attack. Intensive and cardiac care behind him, he is now home and taking it very easy under the watchful eye of his lovely spouse. Poles are for firemen to climb Chick.

George Steffen, 5935 Liebig Ave. Bronx, N.Y. 10471
Chick DeMarti, 18028 Falda Ave. Torrance, Ca. 90504.

BENEDICT ARNOLD,
Dr. Faust, coming soon to a newstand near you. Read it and weep for the sale of a soul.

A User's View of TEXLINK

by Steve Chalcraft, BBS Sysop

I am strictly an amateur reveiwer and I hope you will all kindly keep this in mind as you read my impressions of the pergram named TEXLINK BBS version 5.22.

Producers of TEXLINK BBS are:

The Ottawa T.I.99/4A User's Group
P.O. Box 2144, Station D
Ottawa, Ontario
Canada
KIP 5W3

This system is 100% TMS9900 assembly language. Even the supporting management programs are written in assembly. Besides being quick, these utility programs are very clear with a logical, systematic approach to defining and adjusting the bulletin boards files. It is a very well organized system of programs with quite adequate documentation.

First, I'll talk about the programs weaker points. Corrections for some of these problems, whether they're my failure to set-up things correctly or are with the BBS program, will be greatly appreciated by me. Please send them to:

Steve Chalcraft
11421 Lindale St.
Norwalk, Ca.
90650-4718

Some of the functions that are performed by the management programs would be better if they could be performed by the sysop from within the BBS program, especially the USER LOG MANAGER. As it is, the sysop must shut down the system and load in the ULMGR program in order to delete or add any users into the system. The information each guest which wishes to become a regular caller must enter has to be manually rekeyed into the user file. Name, address, password, phone number, etc.... this could use a change.

A bug in the initialization process causes the LASTTEN callers file to be reset to zero callers each time you have to restart the main BBS program. This, along with having to login to reset the DATE, and re-enter the SYSTEM NOTE which gets re-initialized to zeros and blank too, gets old in a hurry.

Another feature, which is not to my personal liking, is the constant use of files with a line length of 38 characters. It is good for the TI99/4A users with TVs for their monitors that lose the first and last characters to the edges of their screens, but give me 80 coluan lines and let it wrap. I don't usually read stuff off the monitor while on line anyway. I dump it out to the printer or a file and read it later.

Now for the good stuff. It has an excellent message entry editor. There is no need to enter text a line at time as it will accept your message and carry

any split word at the end of a line to the next line as fast as you can type it in. Also, through a little testing I have determined that if you are using TELCO and have set the line pacing to 5 (60ths of a second) then you can ASCII upload in continuous format.

The use of file paths in the initializing manager is a very nice feature. I hope that more of our ever resourceful programmers fill pick up on this tried and true CPM style file management technique.

In general, TEXLINK is very easy for the BBS USER to operate. Through the use of a good choice of options at the message base menu, the system users can read or scan all messages, just their own messages, or from a specific date with continuous output of messages, or a pause at the end of each meassage. Killing your own mail is permitted, but is not necessary for the operation of the board.

Uploading and downloading of files and programs is handled quickly and smoothly. The catalogs of the multiple file areas are simple.

Lastly, let me say that I like these programs over all. My compliments to the authors.

```
* SOURCE CODE TO WRITE CHECKSUM FOR ENTERED XB LINE ON SCREEN
* BY TOM FREEMAN, LA 99ERS
* THIS IS PUBLIC DOMAIN, PLEASE DISTRIBUTE IT WIDELY!
* THIS IS VERSION 2.0 New or changed lines are in italics!
* IT TAKES INTO ACCOUNT TRANSPOSITIONS
* AND INDICATES IT BY GIVING RESULTS IN HEX INSTEAD OF DECIMAL
       DEF  ON,OFF,CHECK,CURSOR
VMBR   EQU  >202C
VMBW   EQU  >2024
VSBR   EQU  >2028
VSBW   EQU  >2020
VWTR   EQU  >2030
XMLLNK EQU  >2018
SCROLL EQU  >0026        ADDRESS OF ROUTINE IN ROM INDEXED ON >6010
NSAVE  EQU  >8304                EQU >7ADA IN MY XB MODULE
LSAVE  EQU  >8342        ADDRESS WHERE LENGTH OF CRUNCHED LINE IS SAVED
FAC    EQU  >834A
GRMRA  EQU  >9802        GROM READ  ADDRESS PORT
GRMWA  EQU  >9C02        GROM WRITE ADDRESS PORT
DONE   DATA 0
SAV11  DATA 0
SAVEGA DATA 0
LOWAD  DATA >6AA0        /ADDRESS RANGE IN GROM WHERE FIRST KEY PRESS
HIAD   DATA >6AD8        ~ON COMMAND LINE IS REQUESTED
ENTER  DATA >000A,>0B0D  ENTER KEY, UP AND DOWN ARROW
COUNT  DATA 0
CUR1   BSS  8
CUR2   DATA >007E,>4242,>4242,>7E00 HOLLOW CURSOR DATA
INVVID DATA >1F1F        INVERSE VIDEO COLORS,THIS IS BLACK ON WHITE
TITLE1 TEXT 'XBASIC ERROR CHECKER V.2'
TITLE2 TEXT '    USING CHECKSUMS     '
TITLE3 TEXT 'BY TOM FREEMAN, LA 99ERS'
*The next 6 lines replace 9 lines of the original
HEXASC MOV  R2,R3        Working copy
       ANDI R3,>F        4th nybble only
       AI   R3,>30       To get an ASCII copy,A-F will directly fol-
*                        low 0-9 in the alternate character set
       SWPB R3           TO MSB
       RT                Back
CURSOR LI   R0,>03F0
       LI   R1,CUR1
       LI   R2,8
       BLWP @VMBR        SAVE ORIGINAL CURSOR PATTERN AT CUR1
       LI   R0,>4800     /THE 80 BYTES FROM >480 TO >4CF ARE ASCII 48-
       LI   R1,LBUF      !57 ("0" TO "9").  TEMPORARILY STORED AT
       LI   R2,80        \LBUF
       BLWP @VMBR
       LI   R0,>7000
       BLWP @VMBW        NOW PUT THEM AT >700 AS ALTERNATE CHAR. SET
*The next 6 lines are new
       LI   R0,>5008     /THE 48 bytes from >508 to >538 are ASCII 65
       LI   R1,LBUF+10   !70 ("A" to "F").  Temporarily stored at
       LI   R2,48        \LBUF+10, right after 0-9
       BLWP @VMBR
       LI   R0,>7500
       BLWP @VMBW        Complete the alternate character set
       BLWP @XMLLNK
       DATA SCROLL       SCROLL UP 1 LINE
       LI   R2,TITLE1
```

```
        LI   R3,>6060      ADD BASIC BIAS TO TITLE CHARACTERS
        LI   R4,36
        MOV  R2,R1
CR1     A    R3,*R2+
        DEC  R4
        JNE  CR1
        LI   RØ,>2E4
        LI   R2,24
        BLWP @VMBW         WRITE 1ST LINE
        BLWP @XMLLNK
        DATA SCROLL        SCROLL AGAIN
        LI   RØ,>2E4
        LI   R1,TITLE2
        LI   R2,24
        BLWP @VMBW         WRITE 2ND LINE
        BLWP @XMLLNK
        DATA SCROLL        SCROLL AGAIN
        LI   RØ,>2E4
        LI   R1,TITLE3
        LI   R2,24
        BLWP @VMBW         WRITE 3RD LINE
* CALL LINK("CURSOR") DOES THE SETUP AND CONTINUES ON TO "ON"
* CALL LINK("ON") STARTS HERE AND DOESN'T NEED THE SETUP
ON      LI   RØ,>03FØ
        LI   R1,CUR2
        LI   R2,8
        BLWP @VMBW         LOAD THE HOLLOW CURSOR INTO VDP
        LI   RØ,CHECK      /LOAD THE INTERRUPT ADDRESS INTO THE ISR
        MOV  RØ,@>83C4     \(INTERRUPT SERVICE ROUTINE) HOOK AT >83C4
        RT
OFF     LI   RØ,>03FØ
        LI   R1,CUR1
        LI   R2,8
        BLWP @VMBW         RELOAD THE ORIGINAL CURSOR
        CLR  @>83C4        CLEAR THE ISR HOOK (TURN OFF INTERRUPT)
        RT
CHECK   MOVB @GRMRA,@SAVEGA "PEEK" AT THE CURRENT GROM ADDRESS AND SAVE
        SWPB @SAVEGA         IT AT SAVEGA, MSB 1ST. GROM ADDRESS IS NOW
        MOVB @GRMRA,@SAVEGA INDETERMINATE
        SWPB @SAVEGA
        DEC  @SAVEGA         ADJUST FOR AUTO INCREMENT
        C    @SAVEGA,@LOWAD TEST FOR THE LOW END OF RANGE WHERE START OF
        JL   CHECK1          COMMAND LINE IS,JUMP OUT IF TOO LOW
        C    @SAVEGA,@HIAD  HIGH END OF RANGE
        JH   CHECK1          JUMP OUT IF TOO HIGH
        CLR  @DONE         RESET FLAG FROM PREVIOUS CHECKSUM ROUTINE
        CLR  @NSAVE        THIS CORRECTS FOR A MYSTERIOUS ERROR I FOUND!
CHECK1  MOVB @SAVEGA,@GRMWA RESET GROM ADDRESS THROUGH GRMWA PORT
        SWPB @SAVEGA
        MOVB @SAVEGA,@GRMWA
*NEXT 4 LINES SET THE "INVERSE VIDEO" FOR CHECKSUMS
        LI   RØ,>81C       RESET COLORS FOR CHARACTER SETS 13-14 AT EVERY
        LI   R1,INVVID     INTERRUPT(XB ALWAYS RESETS TO DEFAULT).
        LI   R2,2          These 4 lines can be deleted if you don't
        BLWP @VMBW         like the inverse video effect
*NEXT 1Ø LINES CHANGE SCREEN & CHAR COLORS WHILE IN CHECKSUM MODE
*AND CAN BE DELETED IF YOU DON'T LIKE THE EFFECT
        LI   RØ,>80F       START OF COLOR TABLE FOR CHAR SET Ø
        LI   R1,>F4ØØ      WHITE ON BLUE
```

```
       LI   R2,13          13 COLOR SETS
COL    BLWP @VSBW          WRITE A BYTE TO COLOR TABLE
       INC  RØ             NEXT COLOR SET
       DEC  R2
       JNE  COL
       LI   RØ,>Ø7Ø4       SCREEN COLOR 4(DARK BLUE)
       BLWP @VWTR
*END OF OPTIONAL LINES
       ABS  @DONE          /IF THE ROUTINE WAS ALREADY DONE
       JNE  RETURN         \GET OUTTA HERE!
       LI   R1,3            CHECK FOR THE 3 VALID ENTRY KEYS AND LEAVE IF
CHECK2 CB   @ENTER(R1),@>8375  THERE AREN'T ANY. NOTE USE OF INDEXING
       JEQ  C1             IF VALID KEY THEN GO ON
       DEC  R1             GO FOR MORE
       JNE  CHECK2
       RT
C1     MOV  @NSAVE,@NSAVE /WHEN >83Ø4 CONTAINS A NON ZERO KEY AND IS =
       JEQ  RETURN         \WHAT IS IN >834A THEN WE'RE READY TO GO!
       C    @NSAVE,@FAC
       JNE  RETURN
       SETO @DONE          INDICATE THE CHECKSUM IS ABOUT TO BE WRITTEN
       MOVB @LSAVE,R2      GET THE LENGTH BYTE OF CRUNCHED LINE
       SRL  R2,8           MOVE TO LSB
       LI   RØ,>Ø82Ø       CRUNCH BUFFER
       LI   R1,LBUF        WHERE WE WILL STORE IT
       BLWP @VMBR          MOVE IT
       CLR  @COUNT         COUNT WILL CONTAIN CHECKSUM, IN BINARY
*From C2 to DO are new. Replace the original lines
C2     MOVB *R1+,R3        Byte in crunch buffer R2 bytes from end
       SRL  R3,8           To LSB
       MPY  R2,R3          Mpy by its position,right justify in R4
       SWPB R4             Move the LSB to MSB for Add byte
       AB   R4,@COUNT+1    As we add each multiplied value(the part less
*                          than 256,the value obtained never goes over
*                          255 because it is a byte operation
       DEC  R2             Another?
       JNE  C2             Yes, go back
DO     MOV  R11,@SAV11     SAVE THE RETURN ADDRESS
       BLWP @XMLLNK
       DATA SCROLL         SCROLL UP THE SCREEN
       LI   RØ,>2E2        3RD COLUMN, BOTTOM ROW OF SCREEN
*The next 11 lines of code replace those in the original up to MOV @SAV11
       MOV  @COUNT,R2      MOVE THE VALUE AT COUNT (WORD VALUE BUT LESS
*                          THAN 256, TO R2
       BL   @HEXASC        Get the Right hand nybble
       MOVB R3,@LBUF+1     Save it
       SRL  R2,4           3rd nybble
       BL   @HEXASC        Get the left hand nybble
       MOVB R3,@LBUF       Save it
       LI   R2,>BØBØ       >5Ø to get to alternate char.set,plus >6Ø
*                          for basic bias
       LI   R1,LBUF        Ram location
       A    R2,*R1
       LI   R2,2
       BLWP @VMBW          Write to screen
       MOV  @SAV11,R11     RESTORE RETURN ADDRESS
RETURN RT                  AND RETURN
*                          THIS IS END OF PROGRAM AND IS A CONVIENT PLACE
*                          TO PUT THE BUFFER,WHICH HAS NO DATA TO START
LBUF   END
```

TELECOMMUNICATIONS

BBS ing with Danny
==========

As promised last month, we are back again, talking about "BBSing"(He!,He!) And we will talk about the LA99ers TI-WORLD, not because it is better than the rest, but because it is the only one that I can call without running up my phone bill anymore(Beside that, I am the Sysop).

So without any more small talk lets get to it.

If you remember last month we talked about the fact that you needed 1) a telephone 2) A modem. 3) A terminal program(OTHER THAN TE II).

Let me for a second deal with the terminal program. Also known as a TE program or Terminal Emulator. Now the names that come to mind for such programs are "Fast Term, Mass Trans, 4A Talk, P-term and Telco". By far the most popular is Fas-Term. But it is not the easiest to use. It does take a little learning...they all do!!

In my opinion(and it is my opinion), the easiest to use is "TELCO", But not on PC-P, until you learn how to work your way around the ins' and outs' of PC-P (PC-PURSUIT). If you are going to be on PC-P, then the "MASS-TRANS" is the best way to go on a 99/4a, and I hope the some day we will be able to put the Multi Xmodem Transfer, into this board(you dreamer!).

Now all of that out of the way you are hooked up and ready to go(I hope?).

The next step is to: 1) Run the program (Terminal Prog.) To do this you must have a disk drive and 32k memory or better. I do not know of any "XMODEM" program that will run on less than that.

RULE #1.

If you are on a "Dumb Modem", or a "SMARTMODEM", and you have "Call Waiting" on your Phone? Call your local phone company and learn how to temporarily cut it off!! This is a must. Also if you have and extension in another room or the phone that is hooked to your modem. DO NOT PICK IT UP WHILE DATA IS BEING SENT OR BEING RECEIVED! That will knock you off line and mess up your connection.

Ok. if you are on a "Dumb modem", and your program is in "Terminal mode" (BLANK SCREEN WITH ONLY A CURSOR) pickup your hand set and dial the number of the BBS. You will hear a TONE. Turn on your modem. Put the phone back on the hook and look at your screen. I will say "CONNECT 300" OR "CONNECT 1200" depending on the "Baud rate" that you called at! Some of the BBS's have 2400 bauds.

Let me answer your question, before you ask it: "HOW DO I KNOW WHAT BUAD RATE TO USE???".

1) You can only call at the HIGHEST baud rate that YOUR MODEM, can handle.

2) You can only call at the HIGHEST baud rate that the BBS, can handle.

98% of all the modems, will handle at least 300 bauds. There are a few of the old 110's still around.

90% of all the BBS's, that I call, can handle 300 and 1200. 10% are still have only 300.

5% are at 2400 bauds. They are comming fast. Roger Davis' of the 99bbs in LA is the only all TI board with 2400 bauds.

Since I am using this board as the example. I will tell you what my board will do, though it may not hold true for all Boards! The first message to appear will be:

CONNECT 1200

TI-WORLD 99BBS

Do you want ANSI Graphics? Y/N:

If you cannot read these messages (they are al garbage)...then you know that either your "PARITY" is wrong, (hangup and change it to 8 data bits, No parity and 1 stop bit. I can not tell you how to do that, because I don't know what terminal program you are using), or you may be using the wrong baud rate. In either case, the changes described above should clear it. By the way! That is why TE II will not work with this board. As far as I know TE II can not handle the 8N1.

I will not get into changing Parity and buad rate on line at this time.

(continued next Page...)

(TI-WORLD 99BBS cont.)

The question of whether or not you want ANSI, does need to be talked about for a second.

This is 1 of 2 (maybe there will be 3 by the time you read this?) TI BBS's that are running ANSI Graphics' for their TITLES and MENU FRAMES. The other is the OCUG 99BBS. In Costa Mesa, Calif. 1-714 751-4332. The one that I hope will be coming soon, is our other BBS. The LA99ers TI-CLUB BBS. 1-213 864-2488.

Back to the question? The Board is looking for a yes (Y) or no (N) answer at this point. If you are using the terminal program called "TELCO", answer "Y"es, and the Castle will scroll on the screen and the the LA99ers flag will be raised above the castle. Then the Title screen frame wil scroll on the screen and the cursor will start to move all over the place printing all the information about the board. But don't try to do this with other TE programs. It will only show garbage. If this does happen too you(and I am betting it will!). Just press "S" (for STOP) and the board will go on to the next Operation.

At this point if you are on TELCO, and have answered yes to the graphic question you will see the date. If not you will see:

```
TI-WORLD 99 BBS Version 7.6e
by  Mark Hoogendoorn/Roger Davis/
Ben Hatheway
300/1200

Sysop: Danny Nelson

Sponsored by:
 LA99er Users' Group

Date: Wednesday, 06/08/88

1090 CALLS
74 Active users

 (Enter 0 for New caller)
User number:
```

Lets stop here to give the new callers a chance to catch up.

1) If you have never called this board, you must sign on. So enter a "0" (zero) where it ask for you user number and press <enter>. The board will then tell you "One Moment..", and will run a text file that tells you about the BBS and what is exspected of you on the board. PLEASE READ IT!! You will never see it again. If it is going to fast for you to read. Press the letter "P" and the it will PAUSE for you. When you are ready to resume your reading. Press the letter "R" and it will resume scrolling the text. By the way; This works for all files on this board. Once this is done, it will tell you to:

```
Press enter
```

Once this is done you will be ask a few questions. i.e.

```
First Name: John
Last Name: Doe
From (City, State) Goodtown, CA.

Type of computer
1) Texas Instruments
2) Myarc 9640
3) Apple
4) IBM/Clone
5) Atari
6) Other

Choice:    (just the number)

NOT shown to others!  -Voice phone #

XXX XXX-XXXX : 213 755-7239
```

Now you will be shown the Information that you have entered and ask if it is correct? i.e.

```
John Doe
Goodtown, CA.
Computer: 1
213 755-7239

Is this correct? (Y/N)
```

Answer "Y" if it is and "N" if it is not. If "N" you will have to do it all over again.

Next it will tell you once more.

```
One Moment..
Please enter a password:
```

Lets talk about the password.

YOUR PASSWORD is your sccurity. You should never give your pass word to any one else. Without it you can not get into the board. Alway make your pass word something that you can remember! Once you enter your pass word you will see it only one more time(that is in the next step), there after it will be echoed to you as #### signs. So you must 1) Remember what it is?
2) Upper or lower case (It must be

(continued next Page...)

(TI-WORLD 99BBS cont.)

the same as you entered it the 1st time "CHECK or Check, LoVe or LovE, or what ever you wish). You can even use control code. but that is not a good idea. To continue, let's assume you want to use "CHECK" as your password:

Please enter a password: Check <enter>
Your user # is 75
Your password is Check
Write these down, you WILL need them later!

Press enter
Hello John Doe
You have 0 waiting messages.
Your last call was on XX/XX/88
Last caller was Danny Nelson, # 1

Press enter

The the bulletins will scroll on the screen and you will be asked to press enter again.

YOU ARE NOW IN THE BBS!!! The next thing you will see is the MAIN MENU.

```
=====================================
     *>> TI-WORLD BBS MAIN MENU <<*

 A)NSI graphics on/off
 B)ulletins
 C)hat with sysop
 E)nter new user info
 F)ile transfers (Xmodem only)
 G)oodbye
 H)elp
 I)nfo and news
 L)eave sysop message
 M)essage Base
 O)ther TI BBS's
 Q)uick exit
 U)ser log
 Y)our info
 ?) This menu
=====================================

     Choice: Q
```

For now press the "Q", which will sign you off the board. But pause for a few seconds before you go, so that if I am around and see you sign on, when you get to this point, I will try to give you the 25 cent tour.

Next time will will talk about ASCII and Xmodem File transfers, Menus and Sub menus. Why, How, What and When ?

Later.....Danny

Did you know that...?

by Chick De Marti JULY 1988

REBUTTAL

I read this article in a resent Newsletter (I can't remember which one - that's how important it was) and at first I thought I'd ignore it...but on second thought, I feel it deserves an answer. I wrote this last night on a brown paper bag as I sat on the...(well that's not important).

Page 2 of your illustrious paper, you explained the harsh reality of how few are the contributers and what a tuff time the editors have. Then on page four I read "more words for would-be good spellers:" and the fact that the offenders are "actually from recent TI user group newsletters (including our own!)".

It sure would be unfair to the TI com-community to restrict input to a few 'selected' programmers, reviewers, and commentators...selected by how well they can spell (a God given trait). I guess I'm fortunate that reeders of the TopIcs accept me as I am (or are as poor a speller as I am).

Don't take away the JOY we the givers receive (or is it recieve) by placing restrictions on us.

Outside of that, how are thing?

P.S. This hole article was written tung in cheek. I was running out of ideas, when I came across this article (similar to "Increase Your Word Power" in Reader's Digest, which I searched for every month as a youngster) Even now, along side my console is a dictionary, and a word finder, but it's hard to correct the spelling of a word...that you don't know is misspelled.

P.P.S. I am now typing my articles on an IBM (bite your tongue) and a word processor which has a built in spelling correcter, (which I have been fighting throughout this article for effect.

Now back to businuss (oops).

~~~~~~~~~~~~~~~~

DID-U-KNOW

TI actually stands for Totally Indestructable per Chicago Times...via Boston Computer Society.

RS in RS232 stands for Recommended Standard. Since it's only 'recommended', this explains why so few RS232 pinouts are the same. Take the case of the TI and the IBM, for example.

(thanx again Boston Computer Society)

UPDATE YOU CONSOLE Vs 2.2

If you have a version 2.2 console (one that won't run some ATARI modules), a cheap solution ($3.80 + 3.00 S and A)is to replace GROM 0 in the console. You will need part #1015960-1155 direct from TI. The chip is in a socket in the console, so you won't even need to solder it.

Thanx BYTES and PIECES "Mail Bag"
by W. Jaeger

~~~~~~~~~~~~~~~~

A PROGRAM STARTER

I am involved with a beginner's SIG. A one of the meetings I introduced the participants to a short Program Starter. I have used it (or one like it) for years. Whenever I am in the mode for program (or just horsing around) I first load my "PROG/START". It contains many time saving routines

```
Line 1    Program name reminder
     4    Disable QUIT key
     5-8  Handy for debugging code
CALL SCROLL displays a Msg. at the
            desired row and col.
CALL DELAY creates a delay for a
            desired length of time.
CALL ERASE wipes a desired amount of
            rows.
CALL PAUSE actually a 'Press ANY key
            to continue' routine.
CALL FINISH (guess!)
```

NOTE: The DEBUGGER used was suggested by the routine by Harry Wilhelm of TWIN TI-UG By changing color sets of numbers and arithmatic operators, errors in typing are easy to locate. Yes, this can and has been done with CALL COLOR, but I think this one is classier.

(Program listing follows...)

~~~~~~~~~~~~~~~~
~~~~~~~~~~~~~~~~

```
 1 ! SAVE DSK1.PROG/START
 2 !
 3 CALL INIT
 4 CALL LOAD(-31806,16):: ! --disable quit key--
 5 CALL LOAD(16128,2,224,38,0,2,0,8,17,2,1,63,36,2,2,0,3,4,32,32,36,2,224,131,192
,3,128)
 6 CALL LOAD(16164,240,240,240)
 7 ! use CALL LOAD(-31804,63)     to turn DEBUGGER on
 8 ! use CALL LOAD(-31804,0)      to turn DEBUGGER off
 9 !
10 ! **********************
11 ! * Routines Available *
12 ! *                    *
13 ! *CALL SCROLL(msg,row)*
14 ! *    (press any key) *
15 ! * CALL DELAY(n)      *
16 ! * CALL ERASE(st,fin) *
17 ! * CALL PAUSE         *
18 ! * CALL FINISH        *
19 ! *                    *
20 ! * Use this  area for *
21 ! * TITLES and CREDITS *
22 ! * erase unused lines *
23 ! *                    *
24 ! **********************
100 CALL CLEAR ! start here
110 CALL SCROLL("MY NEW PROGRAM",4):: CALL SCROLL("by Chick De Marti",14)
120 CALL DELAY(300):: CALL PAUSE :: CALL FINISH :: END
10000 SUB DELAY(DX)
10010 !
10020 FOR DELAY=1 TO DX :: NEXT DELAY :: SUBEND
10030 !
10040 SUB ERASE(ROW1,ROW2)
10050 !
10060 X=((ROW2-ROW1)+1)*32
10070 CALL HCHAR(ROW1,1,32,X)
10080 SUBEND
10090 !
10100 SUB SCROLL(MSG$,ROW)
10110 !
10120 TABB=(28-LEN(MSG$))/2
10130 FOR I=1 TO LEN(MSG$)
10140 CALL HCHAR(ROW,TABB+I,ASC(SEG$(MSG$,I,1)))
10150 NEXT I :: SUBEND
10160 !
10170 SUB PAUSE
10180 !
10190 CALL KEY(0,K,S)
10200 DISPLAY AT(24,1):"<press<    > key to continue>"
10210 CALL DELAY(25)
10220 DISPLAY AT(24,8)SIZE(3):"ANY"
10230 CALL DELAY(25):: IF S=0 THEN 10190
10240 DISPLAY AT(24,1):""
10250 SUBEND
10260 !
10270 SUB FINISH
10280 DISPLAY AT(13,13)ERASE ALL:"THE":TAB(13);"END"
10290 CALL DELAY(600)
10300 SUBEND
```

Well, I'm out of coffee. See you next month

Chick

So. Cal.--FALL-4-A-SHARE-FAIR -1988- swap/chat, conference - October Feast.

Many of the southern california TI Home Computer user groups are having a get-to-gather on October 9, Sunday, 1988.

We sincerely hope you will come.

It will be a chance to: discuss mutual accomplishments, ask questions, share software, chat with other user group members, swap hardware and software (trade, buy, sell), have a picnic lunch outside.

Just bring any programs and hardware you want to share or swap or sell and perhaps a blanket something to put on the grass. There will be a soft-drinks table fully stocked.

From 12 noon to 5pm we can pick-up some great bargins and discuss topics of mutual interest.

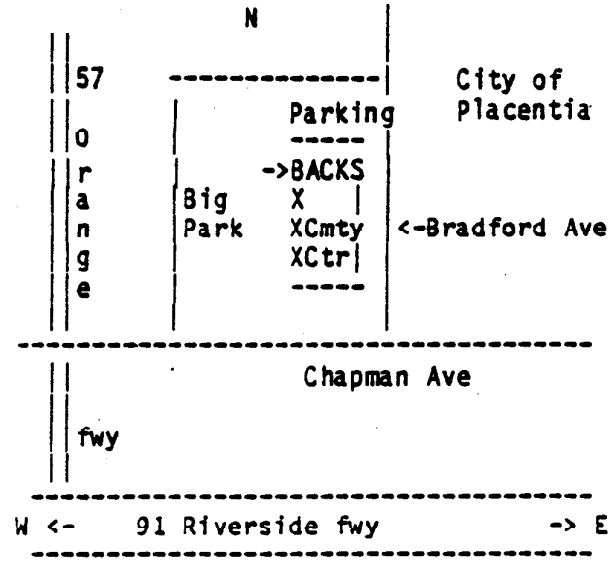
Please tell your TI friends and bring your family, if you want, since it will be a big event. There are over a dozen TI computer user groups in southern california with over 1,000 members, and many will be there.

There will be some software and hardware venders there also offering some items you might just be looking for. And there will also be freeware program disks available to you and some clubs will bring their public domain software libraries for you to choose from. Win free products with the many raffles to be held.

Questions? - write or call Bill Harms, 6527 Hayes Court, Chino, CA 91710, OR contact your local TI computer user group.*representatives*.

Come to the FALL-4-A-SHARE-FAIR to get your fair share: of bargins, fun, prizes, knowledge! Get that "backup" hardware you always needed.

Come to: The BACKS Community Building lower level, room 7 at 201 North Bradford Ave, Placentia, CA 92670. It's at the south east corner of a great park with plenty of grass, shade, barbeque pits, and play equipment. It is on the North side of Chapman Avenue which is just north of the Riverside (91) freeway, and just East of the Orange (57) freeway. It's close to the Brea Mall and other stores.



CLUB REPRESENTATIVES

Riverside Group . . . . .Ed Butcher

Pomona Group. . . . . .Bill Harms

Brea Group. . . . . .Rodger Merritt
(also) . . . . . .Ken Hamai

Orange Group. . . . . Jim Swedlow

El Toro GRoup . . . . . Phil Barnes

Los Angeles GRoup . .Chick De Marti

Understanding MYARC MDOS Memory Management, Part 1

by Jim Lohmeyer

may be reprinted with full credit

The memory management functions in MDOS have been very confusing to understand. The sole (as far as I can tell) information for using these functions has been the XOP library uploaded to the information services. I don't think I will be disputed by many if I were to say that this manual is more concerned with usage than understanding. Recently, Tom Freeman approached me on co-converting his masterwork DISkASSEMBLER for the 9640. Unfortunately, we needed a thorough understanding of the memory structure in 9640 mode. The explanation that follows is a compilation of information gleaned from Micropendium articles by Mike Dodd, and conversations held with Lou Philips of MYARC and Peter Hoddie of Genial Computerware. There are no guarantees that this information is 100% correct, although through hacking around I have decided it is accurate.

Memory in the 9640 consists of "pages" of memory. These pages are classified into four groups: physical, local, execution, and shared. I have not been able to get an explanation of what the function of shared pages is. According to Lou Philips, shared pages are pages used by the MDOS OS only - not hardware oriented at all. So, until Paul Charlton decides to let us in on this little secret, we won't worry about it.

Virtual address- the 24 bit (000000-1F400) address relative to the pages you have claimed using memory management XOPs.

Page- a contiguous 8k memory segment.

Physical pages- These are 256 (in a 2 MB 9640) contiguous pages that make up the actual memory in a 9640. Each page is assigned a number ranging from 0 to 255.

Execution pages- The 9995 microprocessor in the 9640 is similar to the 9900 in the 4A in the respect that both can only access 8 pages of 8K at a time. In the 99/4A the memory array was fixed, thus yielding only 64K virtual and physical addressing space. The 9995 using the MYARC gate array memory mapper has a much larger physical memory space (see Physical pages). However, the 9995 can only access 64K at a time. The 64k being accessed is the execution space and has local page address 0000-FFFF at all times. However, since we can use this mapper, the execution space can use any of the 256 physical pages available. The maximum execution page number is always 8. The execution page addresses range from 0000 to >FFFF. The execution pages can be "swapped" by paging in and out "local pages" thus allowing for apparent memory access of 2 MEG.

Local pages- This is where everything gets tied together. The local page is named this because it is local to the task (program) running. Local pages are paged in and out of the execution pages. To get a local page, you must request it from the OS. This is done through an XOP routine provided in MDOS. When you request a local page(s) if the OS has enough to allocate it will grant your request by giving your local pages physical page numbers. BUT- this is not all. To actually access these pages you must map the local pages to execution pages. The local pages are addressed differently depending on which method you are using. The OS addresses these pages using a 24 bit address 000000-1F400. Note that this is only for the OS. The microprocessor can only address 64K. Period. To access these reams of memory, you, yourself have to page them in and out keeping track of what local pages coincide with what execution pages. MDOS provides facilities for keeping track of which physical pages correspond to which local pages. The function is called "get address map", and is just that. It will build, in a specified buffer, the page allocation map.

EXAMPLES

FUNCTION	EFFECT IN MEMORY
request 8 pages from OS	OS allocates pages C0-C7 to your task
build a map of the allocated pages in location BUFFER	BUFFER+ 0 1 2 3 4 5 6 7 8 * C0 C1 C2 C3 C4 C5 C6 C7 * = page already mapped do not change!

In this example, BUFFER represents the configuration of the memory that the os has assigned to your task. Location BUFFER+0 represents local page 0 and BUFFER+8 represents local page 9. BUFFER+0 through BUFFER+7 also represent the execution page map, except, when first requested, these pages haven't been mapped yet. This applies to our example, since we have only just requested pages and not actually mapped any pages yet. First we need an explanation of the mapper and its function.

The mapper is a section of memory 8 bytes long at >F110 (>8000 in the 4A mode). Each of these 8 bytes corresponds to an execution page; >F110 is execution page 0, >F117 is execution page 7. The byte contained in each of these locations, is the physical page number of the

page of memory occupying each execution page. For example, if the mapper was set up like this:

```
>F110  >F112  >F114  >F116
------+------+------+------
 3CC0   C1C2   C3C4   C5C6
```

then it is easy to tell that the physical page in execution page 3 is >C2. From checking our page map above, it is apparent that we have one extra page left over. We can use this page for storage of other data in our program.

The actual paging or "swapping" of pages can be done one of two ways. It can be done with an XOP provided by MODS, or it can be done by directly writing values into the the mapper at >F110.

Looks like I've run out of space for this month. Next month, I will detail the use of the XOPs, finish discussing memory paging considerations, and will have a sample program dealing with memory paging.

DUG SPRAY (sort of) - More on SEB Mods

by Tom Freeman

Rob Halvorson sent me a note on Genie saying that my FCTN-SHIFT mods for SEB didn't work on his GramKracker'd XB with the GK UTIL I mods added, plus a couple of others written up by Mike Dodd, in Smart Programmer, because the data at at g6AD7 was not what I said it was. Here is the solution, in my response to Rob, for those of you who want to used the GK Util'd XB on the 9640, or don't like the three-key presses.

Dear Rob,

Got your letter and of course I considered it a challenge! Unfortunately it did take a while, but here is the answer, and this time I tried it out and it works. Had a few lockups first though - it turns out that a direct branch in GPL resets the condition bit, which as you will see, is a problem.

What GK Extended Basic (and possibly the original XB module!) has at g6AD7 is the following: CA 75 20. This means CHC >20,@KEY . It effectively screens out keypresses below >20, i.e. the function keys, and branches away if the value is equal to or higher than >20. The problem with the routine I sent you was that I thought I could branch back and preserve the information - not true!

Therefore do the following: type in the code as described in the newsletter (even though the original code you found at 6AD7 was not what I said) up to the 06 DB E1 on the 6th line of data for g7796. At this point type: CA 75 20 6B D0 4A DC . This translates to:

```
CHE >20,@KEY Is key press less  than >20
BS  >6BD0    Higher, go to 6BD0
                    (same code as followed 6AD7)
BR  >6ADC    Lower,back where original routine was
```

I plan to publish this also, so others can take advantage of what you made me do! By the way, you can of course also alter the disk files, just add 6 bytes to each address to get to the right place in the appropriate sector.

Good luck.

Tom

XB MODS - Speeding up the Auto Repeat

by Jim Lohmeyer

May be reprinted with full credit

This mod was prompted by Steve Mehr in last month's TopIcs, in which he asked Mike Dodd to come up with a mod to change the delay before the XB key routine begins to auto repeat. Steve being the impatient guy he is, wanted it to repeat faster. Unfortunately for Steve, Mike has been on vacation for the past four or five weeks, and I'm sure he didn't want to be bothered. So, in his stead, I found the change for him. What are friends for?

This mod will work with TI XB, GK UTIL1 XB, and SEB. Check compatibility with any other XB.

Using the GRAMKRACKER editor (or for us GENEVE folks, a sector editor) search for the string CA 00 FE in GRAM 6 of XB. This translates to:

```
HFE  BYTE >FE
     CHE  @>8300,@HFE     I found mine at >6ABC
```

This is in the routine that checks to see if the same key has been pressed, and if so, for how long. As it stands, it has a delay time of >FE or 254 decimal. To speed it up, change the byte >FE to any other value. I suggest >70 for a good delay time, although Steve uses >20,

because his time is too valuable to wait for a key to repeat (grin).

If you are using a sector editor, you MUST be sure you are searching in the right file. It would be nearly impossible for me to describe what file to use, since the combination of files you could be using are infinite.

Another way to do it is with this short XB routine. Assuming that your XB GRAM 6 is similar to mine, this will work:

```
100 CALL INIT
110 CALL LOAD(8194,37,16,63,248)
120 CALL LOAD(9460,120,0,2,0,156,2,2,1,156,0)
130 CALL LOAD(9470,2,3,106,188,212,3,6,195)
140 CALL LOAD(9478,212,3,212,96,36,244,16,255)
150 CALL LOAD(16376,83,84,65,82,84,32,36,246)
160 CALL LINK("START")
```

On line 120, the first number "120" is the delay time, so change it to suit your preference.

Before running this program, set the write protect switch to the "OFF" position (GENEVE users ignore this, obviously.) After the program is run, it will "lock up" the computer. At this time, either hit the reset switch, turn the computer off and back on, or if using the GENEVE, hit FCTN SHFT SHFT to return the the cartridge loader screen. In the program, I intentionally lock up the computer to offset the chance that you might be modifying MYARC XBII, in which case, if you were to reset the computer (as the program originally did) the write protect would be off, and it would load the 128K OS to cart ram.

The above XB call loads were created by a program by Tom Freeman, from my original assembly source code. It is a very useful program, and is available on a disk called "UTILITY PROGRAMS" available in the marketplace listed at the end of this newsletter. A very useful disk, a bargain price.

The source code for this program follows

```
*
* source code to change delay time of
* auto repeat in XB 7/19/88 Jim Lohmeyer
*
      DEF  START

H7C   DATA >7C00

START LI   R0,>9C02        GROM write addr port
      LI   R1,>9C00        GROM write data port
      LI   R3,>6ABC        GROM address to change
      MOVB R3,*R0          write MSB of address
      SWPB R3              swap
      MOVB R3,*R0          write LSB of address
      MOVB @H78,*R1        write the delay byte
      JMP  $               "lock up"
      END
```

CHECKSUM Revisited - and Improved

by Tom Freeman

Since I first published my Checksum program last year, it has not received as wide distribution as I would have liked (not speaking from the financial point of view of course, since I placed it in the public domain). The main user has been MICROpendium, which considered it important enough that it now publishes all basic programs in this format. One legitimate complaint about the program was my statement that transpositions in typing could not be taken into account and a mistake therefore would not be detected. Unfortunately this is one of the most common mistakes! Another problem with the program as published in MICROpendium was that the docs were rather murky - this was because my article was exerpted to some degree, and some crucial instructions were left out.

I have since revised the program to detect transpositions - the solution was actually aburdly simple - we merely need to multiply the value of a byte by its position in the string. This gives each one a unique value. I am now therefore clarifying the use of the program as well. There are three things being published in this article. First is the program that actually creates the checksums for a program you have written and finished. It was previously called CHECKSUM, and is now called CHECKSUMV2. It only needs to be used by programmers and is of no value to the user who is typing in a published program. Second is the "CALL LOAD" version of the "CHECK" object code. This was where the confusion came in with the MP article. It is to be run once at the beginning of an XBasic typing session - it sets up all the assembly language code that is needed as well as the REF/DEF table. After it is run, then you should type NEW and CALL LINK("ON"), which is now included as an instruction in the last line. It has nothing to do with what I termed the "CHECK/O" object code. That is what would be produced if you typed in the source code which is at the end of the article and then assembled it as "CHECK/O" and would be invoked by CALL INIT::CALL LOAD("DSKx.CHECK/O")::CALL LINK("CURSOR").

To sum up, the user who is typing in programs has two choices: 1) RUN the CALL LOAD version, then NEW and go on, or type in the source code and assemble it, and run it as object code each time.

Please note that lines that differ from the original

programs are indicated by italics. Also note that the checksums produced have two digit HEX values, rather than 3 digit decimals. This will serve to notify the user which version is being used. Both of the XBasic programs here have the old decimal checksums attached to them, rather than the new ones. Here however is an example of what the new ones would look like.

```
10 CALL INIT :: CALL LOAD(94
60,0,0,0,0,0,0,106,160,106,2
16,0,10,11,13,0,0)!37
20 CALL LOAD(9476)!D2
30 CALL LOAD(9484,0,126,66,6
6,66,66,126,0,31,31,88,66,65
,83,73,67,32,69,82,82)!CB
```

For a fuller explanation, please see the original article in the February 1987 issue of TopIcs. If you don't feel like typing it in, please send a disk with mailer and return postage to me at the club address (P.O.Box 67A79, Los Angeles, CA 90067) along with a dollar contribution to the club, or buy the Utility Disk from the club. It has MANY useful programs on it, and costs only $8.00 plus $1.00 P&H - it even comes with a booklet of printed docs!

CREATE CHECKSUMS, FOR XB PROGRAMMERS, changes underlined

```
100 !CREATE CHECKSUMS FOR XB
ASIC PROGRAMS, BY TOM FREEMA
N, LA 99'ERS  VERSION 2.0
 !112
110 !PUTS CHECKSUM AS A COM-
MENT AT END OF LINE IN TWO
CHARACTER HEX CODES.  THESE
ARE THE SAME AS USER FINDS
ON SCREEN WHEN TYPING IN
PROGRAM !183  .
120 DISPLAY AT(2,1)ERASE ALL
:"CREATE CHECKSUMS FOR XBASI
C ERROR CHECKING V 2.0" : :"
   by Tom Freeman" !162
130 DISPLAY AT(10,1):"INPUT
MERGE FILE?":" DSK1." !007
140 DISPLAY AT(13,1):"OUTPUT
 MERGE FILE?":" DSK1." !108
150 ACCEPT AT(11,3)SIZE(-15)
BEEP:I$ :: OPEN #1:I$,VARIAB
LE 163,INPUT !192
160 ACCEPT AT(14,3)SIZE(-15)
BEEP:O$ :: OPEN #2:O$,VARIAB
LE 163,OUTPUT !053
170 DISPLAY AT(20,1):"ANALYZ
ING LINE":"CHECKSUM IS " ::
HEX$="0123456789ABCDEF" !208
180 LINPUT #1:A$ :: IF LEN(A
$)=2 THEN CLOSE #1 :: PRINT
#2:CHR$(255)&CHR$(255):: CLO
SE #2 :: STOP !115
190 Z=ASC(A$)*256+ASC(SEG$(A
$,2,1))!000 No 2nd statement
200 B$=SEG$(A$,3,163):: L=LE
N(B$):: IF L>158 THEN 230 !1
63
210 N=0 :: FOR X=1 TO L :: Y
=ASC(SEG$(B$,X,1)):: N=N+Y*(
L+1-X):: N=N AND 255 :: NEXT
 X :: N1=INT(N/16):: N2=N-16
*N1 :: N1$=SEG$(HEX$,N1+1,1)
:: N2$=SEG$(HEX$,N2+1,1):: N
$=N1$&N2$ !228
220 DISPLAY AT(20,15):Z :: D
ISPLAY AT(21,13):N$ :: PRINT
 #2:SEG$(A$,1,L+1)&CHR$(131)
&N$&CHR$(0):: GOTO 180 !173
230 DISPLAY AT(22,1)BEEP:"WA
RNING!":" LINE";Z;"IS TOO LO
NG!":"PRESS ANY KEY TO CONTI
NUE" !123
240 CALL KEY(0,K,S):: IF S=0
 THEN 240 ELSE PRINT #2:A$ :
: GOTO 180 !232
```

CHECK OBJECT FILE, CALL LOAD VERSION

```
10 CALL INIT :: CALL LOAD(94
60,0,0,0,0,0,0,106,160,106,2
16,0,10,11,13,0,0)!180
20 CALL LOAD(9476)!156
30 CALL LOAD(9484,0,126,66,6
6,66,66,126,0,31,31,88,66,65
,83,73,67,32,69,82,82)!154
40 CALL LOAD(9504,79,82,32,6
7,72,69,67,75,69,82,32,86,46
,50,32,32,32,32,85,83,73,78)
!111
50 CALL LOAD(9526,71,32,67,7
2,69,67,75,83,85,77,83,32,32
,32,32,32,66,89,32,84,79,77)
!119
60 CALL LOAD(9548,32,70,82,6
9,69,77,65,78,44,32,76,65,32
,57,57,69,82,83,192,194,2,67
)!182
70 CALL LOAD(9570,0,15,2,35,
0,48,6,195,4,91,2,0,3,240,2,
1,37,4,2,2,0,8)!127
80 CALL LOAD(9592,4,32,32,44
,2,0,4,128,2,1,39,42,2,2,0,8
0,4,32,32,44,2,0)!222
90 CALL LOAD(9614,7,0,4,32,3
2,36,2,0,5,8,2,1,39,52,2,2,0
,48,4,32,32,44)!128
100 CALL LOAD(9636,2,0,7,80,
4,32,32,36,4,32,32,24,0,38,2
,2,37,22,2,3,96,96)!042
110 CALL LOAD(9658,2,4,0,36,
192,66,172,131,6,4,22,253,2,
0,2,228,2,2,0,24,4,32)!182
120 CALL LOAD(9680,32,36,4,3
2,32,24,0,38,2,0,2,228,2,1,3
7,46,2,2,0,24,4,32)!020
130 CALL LOAD(9702,32,36,4,3
2,32,24,0,38,2,0,2,228,2,1,3
7,70,2,2,0,24,4,32)!012
140 CALL LOAD(9724,32,36,2,0
,3,240,2,1,37,12,2,2,0,8,4,3
2,32,36,2,0,38,46)!222
150 CALL LOAD(9746,200,0,131
,196,4,91,2,0,3,240,2,1,37,4
,2,2,0,8,4,32,32,36)!069
160 CALL LOAD(9768,4,224,131
,196,4,91,216,32,152,2,36,24
8,6,224,36,248,216,32,152,2,
36,248)!118
170 CALL LOAD(9790,6,224,36,
248,6,32,36,248,136,32,36,24
8,36,250,26,8,136,32,36,248,
36,252)!132
180 CALL LOAD(9812,27,4,4,22
4,36,244,4,224,131,4,216,32,
36,248,156,2,6,224,36,248,21
6,32)!255
190 CALL LOAD(9834,36,248,15
6,2,2,0,8,28,2,1,37,20,2,2,0
,2,4,32,32,36,2,0)!228
200 CALL LOAD(9856,8,15,2,1,
244,0,2,2,0,13,4,32,32,32,5,
128,6,2,22,251,2,0)!014
210 CALL LOAD(9878,7,4,4,32,
32,48,7,96,36,244,22,67,2,1,
0,3,152,33,36,254,131,117)!1
62
220 CALL LOAD(9900,19,3,6,1,
22,250,4,91,200,32,131,4,131
,4,19,54,136,32,131,4,131,74
)!019
230 CALL LOAD(9922,22,50,7,3
2,36,244,200,160,131,66,9,13
0,2,0,8,32,2,1,39,42,4,32)!1
35
240 CALL LOAD(9944,32,44,4,2
24,37,2,208,241,9,131,56,194
,6,196,184,4,37,3,6,2,22,248
)!069
250 CALL LOAD(9966,200,11,36
,246,4,32,32,24,0,38,2,0,2,2
26,192,160,37,2,6,160,37,94)
!246
260 CALL LOAD(9988,216,3,39,
43,9,66,6,160,37,94,216,3,39
,42,2,2,176,176,2,1,39,42)!1
86
270 CALL LOAD(10010,164,66,2
,2,0,2,4,32,32,36,194,224,36
,246,4,91)!144
280 CALL LOAD(16376,79,78,32
,32,32,32,37,254)!043
290 CALL LOAD(16368,79,70,70
,32,32,32,38,24)!241
300 CALL LOAD(16360,67,72,69
,67,75,32,38,40)!003
310 CALL LOAD(16352,67,85,82
,83,79,82,37,100)!057
320 CALL LOAD(8194,39,42,63,
224)!096
330 CALL LINK("CURSOR")!! PR
INT "NOW TYPE ""NEW"", THEN
""CALL LINK(""ON"")" !182
```

CERTIFICATE '99 MAKES THE GRADE!

by Steve Mehr, UG Member

Author's note: (This review is being sent simultaneously to the editors of TopIcs, the editors of MICROpendium, and uploaded to GEnie.)

A review of
Certificate '99 version 2
and
Certificate Companion

Report Card for
Certificate '99 version 2

Ease of Use ..... A
Performance ..... A-
Documentation ..... A-
Value ..... A
Final Grade ..... A

Cost: $19.95 plus $1.00 shipping
Manufacturer: Great Lakes Software, 804 E. Grand River Avenue, Howell, MI 48843

Requirements: 32K memory, disk system, Epson/Star or compatible printer, and one of the following modules: Extended BASIC, Editor Assembler, Mini Memory, or TI-Writer.

Report card for
Certificate Companion

Ease of Use ..... A
Performance ..... A
Value ..... A
Final Grade ..... A

Cost: $9.95 plus $1.00 shipping
Manufacturer: Same as above
Requirements: Certificate '99 version 2

Well, Great Lakes Software has done it again! Certificate '99 certainly deserves another review due to its latest revision, version 2, and the release of Certificate '99 Companion. But first a little background.

During TI-XPO-88 held in Las Vegas last February, I had the pleasure of meeting the two authors of Certificate '99, Gene Chandler, and Richard Parquette. I was very impressed with the way they represented their company. They were very courteous and has a very professional appearance. Both Gene and Richard are full time students, Gene at the University of Michigan, and Richard at General Motors Institute studing engineering. Where they find time to develop, program, package, distribute, and otherwise run Great Lakes Software, is a mystery to me.

The program was developed by Gene and Richard working together on different parts of the program. Gene wrote all the programming code, and Richard employed his expertise in graphics into the program. The program was written entirely in Bitmap mode, Gene's programming environment of choice. This does address a few of my previous complaints (like cursor movement) as every routine had to be developed from scratch by Gene. Using Bitmap mode though, allows the ability to use the WYSIWYG concept (what you see is what you get) which more than makes up for its minor weaknesses. So as not to be a redundant review, only changes in each respective area will be discussed. Please refer to the original review published in the December '87 (Vol. 4 No. 11 Pg. 31) issue of MICROpendium. This review deals with Certificate '99 and Certificate Companion since its versatility is greatly enhanced when used as a package.

Ease of Use: The program functions the same as version 1 except instead of inserting the data disk after loading the program, you are instructed to insert the Companion disk, if you own it. If not, the program reads information from the program disk allowing all original selections as in version 1. The program asks you next if you want to load a saved certificate. Yes, you've guessed it! Now you have the ability to save any number of creations to disk and be able to load them back in for your own customized defaults!

Font Selection: With the Companion disk read by the program, you are presented with twelve different fonts for you to choose from, six more than the original program.

Border Selection: Once you have selected your font, you are asked for a border filename. A default filename is suggested, but any filname may be entered. Once loaded, each file contains six borders to choose from along with the option to load another border file or choose no border at all.

Graphic Selection: Selecting a graphic is accomplished using the same technique used in border selection. You may cycle through six, choose none, or load another graphic file. Options involving magnifying and placing your graphic have not been altered in this version.

No changes were made in the Signature Selection, Text Entry, or the Printer Output portions of the program. When printing has completed though, you have the option of saving your certificate to disk. The file saved will contain all of your selections for the certificate just printed so if you elect to load this file at the beginning of a future session, they will become the defaults for that session. Although a filename is suggested at this prompt, you may select any filename of

your choosing.

Performance: The program has come along way in this area and that says quite a bit for Great Lakes Software. With the release of Certificate Companion, Great Lakes has opened up the program with the creative user in mind. Through the use of Joy Paint's Pal version 2.0, you now have the ability to access the data files included with Certificate '99 and its Companion. All data files on the earlier version were heavly scrambled making modifications impossible. Also, a new compression technique is utilized on the new data files which allows the ability to store more files on a data disk. This is good news for the single sided disk user. All files included on Certificate '99 version 2 and its Companion are 'saved compressed'. This means that to examine or modify these files, one must purchase Joy Paint's Pal version 2.0. Saving data files with Joy Paint's Pal using its 'Save Any' function will create a 25 sector file. This was tested with three files as found on the Certificate '99 version 2 disk. Saving the filename 'CDATA04' using the 'Save Compressed' feature reduced its size to just 18 sectors, 'BORDERS01' shrunk to 16 sectors, and 'GRAPHICS02' was reduces by 60% down to just 10 sectors! Certificate '99 will recognize if files were saved compressed and process them as required. When creating your own data files, Joy Paint's Pal must be used to take advantage of its 'Save Compressed' feature. TI-Artist may also be used to save files in the 25 sector format that Certificate '99 recognizes by using the 'Store' icon to 'Save Picture', so those who don't own Joy Paint or its Pal may still create new files for Certificate '99.

You can now modify all the font, border, graphic, and even signature files making the program a virtual playground for anyone wishing to create truly custom certificates. I have seen a few interesting borders created by Rodger Merritt, author of the popular Print-It and Picture-It graphics programs. Maybe Great Lakes can corral a few creative minds like Rodger's for the release of Certificate '99 Borders Companion. In fact, Mehr-Ware decided to use Certificate '99 to create the documentation for its first hardware release, Simple-Disk which was initially presented to Ray Kazmer for his untiring efforts in the TI community!

The ability to alter the screen and text colors was removed from this version. I would have liked to have the option of selecting my own color choices when running the program. The default colors were tested on a black and white T.V. and no clarity problems were observed. More thorough error checking has also been established in this version. I could not convince the program to crash no matter how hard I exercised my digital implements.

Documentation: The documentation for version 2 has been updated as far as differences from version 1 are concerned including graphic print outs of the new additions available on the Companion disk. The conflict involving the placement of the graphic and the signatures in the example has also been eliminated. There was no documentation included for the Companion disk since you must have Certificate '99 version 2 to utilize it, which does include examples as mentioned above.

Final Grade: Well now, not only is Certificate '99 and its Companion one of the most productive graphic packages available for the 4/A, it also performs as well as it should given such a claim. Thanks, Great Lakes, Gene and Richard, for your continued support. Now let's show our support for this graphic dynamic duo!

GRAPHICS COMPATIBILITY, ANOTHER VIEW

by Stephen Shaw

This article has been prompted by a very odd chart of the various Graphics programs for the TI which I came across in a US newsletter- odd because at the end of the day it failed to tell you very much and was decidedly biased!

This article also follows -in a way- from the discussion of various formats of disk file.

Each type of file is referred to by means of a short abbreviation, details of which are given in the first section below:

1. List of Formats:

```
 TI ARTIST- Fonts (_F files, referred to later as TIAF)
            Pictures (_P and _C files, referred to as
            Slides (_S files, TIAS)
            Instances (_I files, TIAI)
 GRAPHX.....Clipart, inc fonts (GC)
            Pictures (GP)
 CSGD.......Pictures (/DT files, CP)
            Graphics (/GR files, CG)
            Fonts-usual (/CH files, CF)
               -care: see note at end!!
            Fonts-DocuPrinter (/DF files, CD)
               Labels (/LB files, CL)
               Letterheadings (/LL files, CH)
    JOYPAINT...Pictures (JP)
               COMPRESSED PICTURES (JC)
    PICASSO....Pictures (PP)
               Fonts (PF)
               Icons (PI)
    BITMAC.....Pictures (BP)
    DRAW N PLOT..Pictures (DP)
    DRAW A BIT 1.Pictures (DAB1)
    DRAW A BIT 2.Pictures (DAB2)
    MAX RLE....Pictures: DV80 files or DF128 files (MP)
```

NOTE: CSGD uses two different sets of /CH files. The font editor creates one set of /CH files, which then have to be converted to another type of /CH file for use. The /CH files referred to here are always the converted

files. The conversion program is on CSGD Volume 1.

MUTUALITY:

This section indicates the types of file each graphics program can use from the above list, WITHOUT using an external conversion utility. The ability to both save and load can be assumed unless otherwise noted:

```
MAX/RLE.....TIAP, GP, MP
TI ARTIST.....TIAP,TIAF,TIAS,TIAI,DAB1,DAB2,DP,GP
GRAPHX.....GC,GP
CSGD 1 AND 2.....CP,CF,CG
CSGD 3.....CF,CG,CH,CL and LOAD ONLY CD.
PICASSO.....PP,PI,PF,TIAP
            Can also LOAD a TI Writer text file.
JOYPAINT.....JP
JOYPAINT PAL 2...JP,TIAP,JC
            Can also LOAD GP,DP
```

GRAPHICS UTILITIES including external (eg separately loaded) conversion routines on main graphics disks. Where more than one type is listed in the above section, conversions are possible as part of the main program, which is usually much faster.

```
THE PRINTERS APPRENTICE... Uses its own picture and
                           font formats, can also use TIAP.
TPA TOOLBOX.....Uses TPA fonts and graphics, plus
                can convert into TPA format the
                following: TIAI,TIAF,TIAP,CF
PRINT WIZARD.....Creates its own format from TIAI
                                          and TIAF
FONT WRITER 2.....Uses, in various utilities, TIAF,
                          TIAI,TIAP,CF,CG,GP
                CAN CONVERT: CG to TIAI, CP to TIAI,
                          TIAI to CG and TIAI to CP.
PICASSO can convert an XB font to PF, or load a PF
          into an XB program.  convert BP to PP.
           Make use of CF and CG files.
CSGD 1 can convert an XB screen into CP.
```

ARTIST EXTRAS (Texaments) can convert: CF or CD to TIAF, CG to TIAI, and CP to TIAI.
ARTCONVERT (Trio+) can convert TIAI and TIAF to TI Writer graphics.
ARTIST ENLARGER(Asgard) works with TIAF and TIAI.
GRAPHICS EXPANDER AND BIGTYPE (Genial) works with TIAF,TIAP, and TIAI.
JBM103 (Disk library) enables graphics to be loaded/saved to/from Extended Basic bit-mapped screens in TIAP format.
UTIL12 (Disk library) has a utility to convert from TIAI to Extended Basic program format- merge file, or listing to disk or printer.
UTIL 7 (Disk Library) has a utility to convert TIAI to TI Writer graphics.
UTIL17 (Disk library) has a utility to convert a segment (5x5 chars) of a GP CG, and a utility to convert CG to TIAI and/or Extended Basic merge file.

The de facto standard has been set by TI ARTIST- only graphics programs released before TI Arist lack TIA capabilities, apart from CSGD, although external utilities have been created to remedy that!

As far as PRINTERs go, all these work with EPSON FX series printers or any printer which follows Epson commands- the usual commands used are:

```
ESC * ( 8 pin bit image mode )
ESC K ( 480 DOT 8 PIN mode )
ESC L ( 960 dot 8 pin )
ESC Z ( 1920 dot 8 pin )
ESC A n (Line spacing in n/72 inch)
ESC l n (Left margin setting)
```

A few programs allow GEMINI printers to be used, but Gemini used two incompatible codings in their printers, and Gemini owners often report problems. A very few programs will support other printer codings.

""c"" ROUTINES

[This was provided to us by Stephen Shaw]

Some short c routines to get you used to using c99 and maybe show how some things are done / some things are used.

These routines are by Donald L Mahler and come from the BOSTON COMPUTER SOCIETY. They have been printed from tested source code.

Remember:

```
*s means "pointer to s" while
&s means "the address of s"
```

File prf is as follows:

```
/* file dsk1.prf */
/* PRINTF REFS */
#asm
   REF  PRINTF
#endasm
```

Save it to disk!

```
/* 1;C */
#include dsk1.prf
int table[]={3,5,2,9,6};
/* sets up an array */

main()
{
  int i; i=0;
/* first term of array is "0th" */
  while (i<5)
  {
    printf("The address of the %dth \n",i);
```

```
    printf("element of table is %u.\n",&table[i]);
/*                  */
/* "&table[i]" =  */
/* "address of ith term of array" */
/*                  */
/* addresses are unsigned integers */
/* that is why we use 'u' */
/*                  */
    printf(".. and the value stored there\n");
    printf("is %d\n",*(&table[i]));
/*                  */
    ++i;
/*                  */
/*  increment i   */
/*                  */
    putchar('\n');
  }
}
```

Type this in using the Assembler editor, save it and then compile it, assemble the result, to say 1/OB. Do NOT select any assembly OPTIONS!
To run using LOAD AND RUN load:
  DSK1.1/OB
  DSK1.PRINTF
  DSK1.CSUP
then start with program name START.

CSUP and PRINTF are supplied with the c99 package.

This second routine uses strings- and also requires the file prf defined above!

```
/* 2;c         */
#include dsk1.prf
main()
{
  char *ptr1, *ptr2 ;
/* two character pointers  */
  ptr1="Boston/Computer/Society";
/*              */
/* the address of a string is  */
/* the address of first letter */
/*              */
  ptr2=ptr1 ;
  while (*ptr2)
/*              */
/*  "*ptr2 !=0" */
/*              */
  {
    putchar(*ptr2++) ;
  }
/*              */
/* spell out the string letter */
/* by letter    */
/*              */
  puts("\n \n Now let's reverse it! \n\n");
/*              */
/* ptr2 is now address  of last */
/* letter of string!!!          */
/*              */
  while (--ptr2 >= ptr1)
/*              */
/* decrease address until back  */
/* at original starting address */
/*              */
  {
    putchar (*ptr2);
  }
  putchar('\n');
}
```

And here is another short example of c99 in action. Try it out now!

```
/* 3;c            */
#include dsk1.prf
main()
{
  char x;
  puts("Enter any letter : \n\n");
  x=getchar();
  putchar('\n');
  printf("The upper case form of %c is",x);
  caps(&x);
  putchar(x);
  putchar('\n');
}
caps(ptr)
char *ptr;
{
  if (*ptr <= 'z' & *ptr >= 'a')
  *ptr = *ptr + 'A' - 'a' ;
}
/*              */
/* if letter is lower case then */
/* decrease ascii value by the  */
/* difference between 'A' (65)  */
/* and 'a' (97)       */
```

Now compile,
assemble (remember, NO options!)
and load and run:
  DSK1.3/O
  DSK1.PRINTF
  DSK1.CSUP
and program start name is START.

If however you wish to transform your program to memory image format, to use with RUN PROGRAM FILE, then load these files, using LOAD AND RUN:
 DSK1.C99PFI
 DSK1.2;O
 DSK1.PRINTF
 DSK1.CSUP
 DSK1.C99PFF
 DSK1.FWSAVE
and now choose the program named SAVE.

Now you will have a single "PROGRAM" file which you can load in one piece, instead of having to load lots of other files.

LA99 LIBRARY CORNER

Copies Of all program disks will be made available to the members at the regular meetings. If you plan to obtain any disks from the library at the meeting it is best to phone or write the LIBRARIAN **in advance** to be sure they will be on hand. I will put your name on them. Disk cost $3.00 4 for $10.00

0000A/B **LA99 DISKS LIBRARY CATALOG** JUNE 88 : #1.00

0000C/D **LA99 PROGRAMS LIBRARY CATALOG** JUNE 88 : $1.00

NEW ADDS FOR JULY LA99 LIBRARY

The Library Committee wish to give thanks to those who donated disk to our Library this month : CIS-BBS, Danny Nelson, Terrie Masters, Jim Susco.

2213 **C:BITS** A graphics library designed to be used with Clint Pulley C99 program. Aid in translation of Basic program to C program. Use TI-Writer to read. (SSSD)240

2220 **C99 V4.0** Fairware by Clint Pulley 30 Townsend Ave. Burlington, Ont. L7T1Y6 Canada. Release 4 of C99 in update form update other REL's), pointer arrays and (gasp) goto. This new language is fast growing. DSDD(720).

2226 **C99M** Fairware by Clint Pulley 30 Townsend Ave. Burlington, Ont. L7YIY6 Canada. implementation of C99 complier for M-DOS Genene 9640 SSSD(132) users.

2227 **C-FILES** A collection of "C" programs from various programers. CLABEL, CLOAD, CRYPTOGRAM, MORSE CODE GENERATOR, FILES, DEMOS (strings, variables), PRIME NUMBERS, PRINTF, JUMBLE, LINES, RADIOCATIVE, TEL AREA CODE, FLOATING POINT, MAZE GAME, SPIRAL, and many more DSSD(709)

2228 **C-OPTIMIZER** C99 code optimizers. V1.2.0 by Clint Pulley. V2.6.1 AND 3.0.0 by Tom Wible. CFIO, ACPFN, PRINTF, SPRINTF, STRLIB. SSSD(330)

2229 **C-TUTOR** From Bostom User Group One Center Plaza Boston, MA 02108 : Disk contains a number of simple "C" programs for tutoring C99 V2.0 with a library of C commands. C-codes, C-compiled Source codes and C-assembled object codes. SSSD(349)

2230 **C-DEMO AV1** A disk of "C" demos. COINAL functions, CUMBW and CVMBR funtions, Grafics, Joystick, $-Earth, VPEER, POKE. SSSD(332)

2231 **C-DEMO BV1** A disk of "C" demos funtions : SOUNDS, SPEECH (say funtions), SPRITES (vpoke), SPRPOS (call position), TWEETY SSSD(175)

2232 **C-DEMO-CV2** A selection of "C" material by Clint Pulley. Programs, Codes, Docs, Graphics, Box demo, codes, games, 3D-Tic-Tac-Toe. SSSD(349)

2233 **C-BOXES** By Tom Wible A library of "C" functions which are used to create and display dialog boxes in text or graphic mode in either normal foreground / background colors or inversed video. SSSD(200

2234 **C-LIB** By Joe Ross A disk of "C"- Sounds, Speech, Graphic, Sprites and a library of over 150 words A-Z of say funtions SSSD(282)

2454 **PLUS** Fairware by Jack Sughrue :Downloaded from CIS-BBS Word processing and utilities disk of templates, tutorials, articles, codes, docs, banner, deskcal, gothic, max-rle, multicolum, view, setup, calendar + many more to be used with TI-writer or Funnelweb) 2SSSD(410)

2455 **MICRO DEX99** Fairware by Bill Gaskill box 2642 Grand Junction, CO 81502 : Publication Referencing Application means that it will let you create files of informations of articles, editorials, reviews, programs, tutorials and the like so that you can find the information again. It may be used for any publications type. Has the ability to store 1100 records per SSSD disk and can sort up to 1400 records per file. Some of the features are add, brouse, catalog, convert, count records, create new files, create sub files, delete, edit, find, index label, merge, print, purge, report and sort. SSSD(298).

2645 **FUNWRITER 4.1** May 1900 Fairware by Tony and Will McGovern 215 Grinsell St. Kotara, NSW 2288 Australia. Allows TI extended Basic or Myrac XBII to provide utility envionment for TI-WRITER, EDITOR ASSEMBELER AND DISK MANAGER with welcome improvements. Compatible with Geneve 9640. Need 32K disk drive + controller and printer. 777 sectors SSSD(311)DOC, 2SSSD(465)programs.

2652 **TELCO V2.1** User-suport software by Charles Earl 34 McLeod St.Ottawa, Ontario Candana, K2P 025. Up date of a Terminal Emulator. Auto dial, redial, stores numbers, conferenee mode, X-modem, ASSII transfer, marcos, spooling, now addes P.C Pursuit dialing, Y-Modem, compress B, faster x-modem, clock, terminal mode improve (VT 52 and HP 2392), option select, plus many more. 2SSSD(723).

2652C **TELCO CARD** More information on Telco that will not fit on TELCO 2.1 disk. 1. A reference card that gives available funtions in the Editor, Marco Editor and Disk Editor mode. 2. An additional modification to Telco to insert your ID and passward. SSSD(52)

2654 **PHONEMAKE 88*3** V2.1 Fairware by Dave Ratcliffe 2832 Craydon Dr. Harrisburg, PA 17104 : To be used with Stu Olson Mass Transfered 4.3 Phonemake 9 modified for Geneve user. Generate all current PCP macro's, edits, delete, make individual marcro's and can edit phone files with greater ease SSSD(143)

2656 **M-COPIER** V1.1 Fairware by Mike Dobb 116 Richards Drive Oliver Springs, TN 37840. This program copies files from one disk to another. Unlike other Disk Managers this program will place all of the FDRs (File Descriptor Records) at the start of the disk. This reduces head stepping of the disk drives thus run faster and reduce wear on the drives. Modified to show if copying over a disk that has a file on it. SSSD(45)

2660 **SORT/EXP** Fairware by peter Hoddie 12 Paul Revere Rd. Lexington, MA 02173. Sort any type of file any record size (except program). sorts up to 8 different fields. up to 1000 records. sorts in either ascending or descending order. Shell or shuttle sorts. best sort I have seen. SSSD(74)

2661 **BBS TI-CITADE** Fairware by Chris George requires DSDD for BBS plus a Game disk (#2662) if you plan to put it on the BBS. Chris BBS in on 24 hours PCP Oregon 300/1200 503-667-4992. DSSD(604).

2662 **BBS-GAMES** For Chris George BBS #2661. Two games Starfleet Battles and D and D Gameroom. DSSD(573)
2663 **PBBS** Fairware by Mike Kimble 1000 Hyatt Ave. Columbia, SC 29203-4247 Paradign Bulletin Board : A complete unique BBS that has all the features you may want in your board. uses both assembly language and extended basis. 3/12/2400 8,N,1. Two screens 40 and 28 columns. DSSD(682).

2840 **CASSETTE** From Erik Olson 6305 Rabbit Ears Circle Colorado Spring, CO 80919 Utilities programs for inputing music via the cassette monitor #1 port with graphic, How to access cassette from Assembly Language, load from cassette without error checking routine. SSSD(146)

4540 **MISC #28** By Chris Bobbitt 5 programs : CALC2 Joystick 4 funtion calculator program, PUZZLE-15 a classic 15 puzzle game, SPACE and BEYOND a adventure type game, SUMKING a run a kindom game, MONO LISA print the lady with a amile poster. SSSD(334)

6030 **ZODIAC V2.0** Fairware John Bulokowski Vernon, CT -Modified to increase dates, Wheel of Fortune -X/B - Find out what happen on your birthday 1900 - 1987 and when your next period of good fortune will happen. plus two other programs Modify TI-Writer data and modify cursor. (SSSD)347

6049 **HOME #1** CIS-BBS May : ARTIFICAL INTELLIGENCE (logic mathematics axioms), PSYCHOLOGY TEST (personality and temperament sorted test) SSSD(46)

6050 **GENEALOGY DATA BASE** Fairware by Allen Wright 77 Andrew Rd. Valentine 2280 N.S.W. Australia. : An excellent program to keep your family tree on a disk. You can create new, load existing, save, add, review, search, cross reference, pedigree chart(4 generation) and input 30 items of information on each person up to 95 persons on a family tree per file name. Quick in entering,retrieving and printing. 2SSSD(391)

7060 **MUSIC #49** From CIS-BBS MAY : Programs are archived and compressed using Barry Boone 2.4 #2628 : JUST THE WAY YOU ARE (Sam Moore Jr.), TRAIN (Steven Foster), WAGNER (Ken Gilliland), WAGNET (Ken Gilliland). SSSD(304)

8105 **DRAW #1** 5 programs down loaded from CIS-BBS MAY: Programs are archived and compressed using Barry Boone 2.4 #2628. : BANNER (make your own banner), INSTANCES (for TI-Artist), POSTER BOY (update of Ed-Cameron wanted poster), TI-ARTIST PIC (RLE pictures), SSSD(297)

8106 **DRAW #2** Programed down loaded from CIS-BBS APR: programed are archived and compressed using Barry Boone 2.4 #2628 : MONA LISA (large poster size picture of the lady with a smile), GRAPHICS (4 graphics and entertainment programs in X/B), PANANA (map of center portion of Panana) SSSD(224)

8107 **GEE** By Gene Krawczyk G is a powerful graphic language in assembly with simple commands. It can draw most anything like TI-Artist but allows a form of animation by rapidy changing screen. Load from E/A #5 DSK1.GEE. SSSD(141)

LIBRARIAN FRED MOORE 7730 EMERSON AVE. LOS ANGELES,CA 90045 213-670-4292

RAFFLE RAFFLE RAFFLE RAFFLE

(DEFINITELY the last month - there will be no more raffles if we don't get a better response)

The Club Raffle for the months of May to July is still for the Myarc 80 track Disk Controller (We have not yet raised enough to cover the cost). This is in my opinion by far the best of the three disk controllers. Used in conjunction with the Myarc Disk Manager, sector interlace can be controlled to best fit your disk drives, and the 80 track eprom allows use of 96 tpi drives that will give you 2880 sectors per disk!! This is 3/4 megabyte.

In order to induce you to buy as many tickets as possible - this is after all a fund raising activity for the Club - the price of tickets has been modified so that the more you buy the cheaper each one becomes. Remember that the more tickets you buy the greater chance you have of winnning.

In order to give our national and international members a chance to join in, each raffle goes for two or three months, so the drawing for the Myarc FDC will be at the July meeting. If you miss this raffle, your entry will be applied to the next one which will be for a ??? we don't know yet <grin>

NAME _____

ADDRESS _____

CITY _____

STATE, ZIP _____

1	TICKET	$2.00	_____
3	TICKETS	$5.00	_____
7	TICKETS	$10.00	_____
11	TICKETS	$15.00	_____
15	TICKETS	$20.00	_____
20	TICKETS	$25.00	_____
25	TICKETS	$30.00	_____
30	TICKETS	$35.00	_____
36	TICKETS	$40.00	_____
42	TICKETS	$45.00	_____
50	TICKETS	$50.00	_____

REMEMBER NEXT MEETING - Wednesday July 27, Torrance Public Library, 7 PM

**** CLUB OFFICERS ****

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Membership in the LA 99ers, including subscription to Topics is $20.00 per year

LA 99er BBS PHONES:

213-755-7239 (Danny Nelson, Sysop) and 213-864-2488 (Steve Chalcraft, Sysop)

MARKETPLACE

(the marketplace is a fund raiser for the club, that is, the "profit" goes to maintain the quality of this Newsletter. In general the price listed splits the difference between cost and retail. Please help your Club.)

SPECIAL - SUPER EXTENDED BASIC by Triton - code by MG & friends 50.ØØ
plus P&H 2.5Ø

SPECIAL #2 - WE HAVE THREE HORIZON RAMDISK, DIFF.CONFIGS - CALL FOR PRICES

MILLERS GRAPHICS

DISkASSEMBLER	18.5Ø	ORPHAN CHRONICLES (PRICELESS)	9.95
ADVANCED DIAGNOSTICS	18.5Ø	NIGHT MISSION	18.5Ø
GK UTILITY I	1Ø.ØØ	SMART PROGRAMMING FOR SPRITES	6.25

GENIAL COMPUTERWARE

XBasher (MIKE DODD)	9.ØØ	XB:Bug (J.PETER HODDIE)	12.ØØ
GRAM PACKER (JPH) "	9.ØØ	REMIND ME! (JOHN JOHNSON)	12.ØØ
PC TRANSFER (MD)	2Ø.ØØ	FONT PACK I (JPH)	9.ØØ
GRAPHICS EXPANDER(JPH)	9.ØØ		

RYTE-DATA

GPL SETS (INCLUDING ASSEMBLER AND LINKER, 4 DISKS	5Ø.ØØ	COMMAND DOS (MONTY SCHMIDT)	2Ø.ØØ
		TECHNICAL DRIVE(BOOK BY ")	15.ØØ
BASIC COMPILER	15.ØØ	SUPER CLOCK SUPPORT	13.5Ø

BYTEMASTER (R. MITCHELL)

MG EXPLORER (UNPROTECTED)	2Ø.ØØ	STRINGMASTER	16.ØØ
KRACKER FACTS (MIKE DODD, ED.)	5.ØØ	UTILITIES DISK/DOCS (T FREEMAN)	8.ØØ
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